# SONY

# BID SPECIFICATION FOR DLP PROJECTORS



# MODEL NUMBER VPD-LE100

INSTRUCTIONS:

REMOVE THIS COVER PAGE AND ADD TO REQUESTS FOR QUOTATION AND PROPOSALS. THE OBJECTIVE OF THIS BID SPECIFICATION IS TO ASSIST YOU IN CLEARLY SPECIFYING THE SONY PRODUCT IDENTIFIED ABOVE, AND ENSURING THAT THE BUYER IS WELL INFORMED OF THE HIGH STANDARD OF PERFORMANCE THAT IS TO BE EXPECTED OF A SONY PRODUCT. THE INFORMATION IN THIS DOCUMENT IS CURRENT AS OF JUNE 2002. PRODUCT SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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### **<u>1.0</u>** General Information

The purpose of this information is to provide the specification for a product whose primary purpose is the reproduction of video and / or computer graphics information for one or more viewers.

This reproduction of this information is to be accomplished via a projection DLP display. This document provides the <u>minimum specifications</u> for this device.

The performance comparison of displays is not only technical in nature, but is also subjective to the user, when viewed in the final display environment. It is recommended that devices meeting the requirements of this specification be compared in the user's application and environment, if possible.

#### 2.0 Description

This product shall be classified as a large screen projection DLP display, or graphics projector. This device shall be directly compatible with both video and computer graphics sources, without the use of external devices to provide this compatibility.

This device shall employ the use of three 1.1-inch Texas Instruments DMD chips for optimum display of high-resolution sources.

This device shall employ a highly mobile design that can easily be ceiling mounted using an optional bracket from the device manufacturer or from third parties or desktop configured for projection booth use. Handles shall be an integral part of the device for simplified transport. Stacking of multiple devices shall be possible with the use of an optional stacker from a third party manufacturer.

#### 3.0 Source Compatibility / Suitability for Application

This device shall be directly compatible with the following sources:

NTSC Video (Composite and Y/C) PAL Video (Composite and Y/C) PAL-M Video (Composite and Y/C) SECAM Video (Composite) Modified NTSC 4.43 (Composite) Component Video (50 and 60 Hz) RGB Video (50 and 60 Hz) FILM / 60P 480P (60Hz) 575P (50Hz) 720P (60Hz) 1035I (60 Hz) 1080I (50 and 60 Hz) 1080P (24 PsF) VGA Computer Graphics (Modes 1, 2 and 3, 60 - 85 Hz) VESA 800x600 Computer Graphics (56 - 85 Hz) VESA 1024 x 768 Computer Graphics (43 - 85 Hz) VESA 1152 x 864 Computer Graphics (70 - 75 Hz) SUN 1152 x 900 Computer Graphics (65 - 76 Hz) VESA 1280 x 1024 Computer Graphics (43 - 85 Hz) VESA 1600 x 1200 Computer Graphics (60 - 75 Hz) Mac 13" Computer Graphics Mac 16" Computer Graphics Mac 21" Computer Graphics

This device shall accept multi-scanning sources, with scan frequencies ranging from 15 to 100 kHz Horizontally, and 40 to 120 Hz Vertically.

This device shall employ the use of a high performance interpolation circuit, which regenerates a high-resolution sampling of the original signal by referring to memorized waveform patterns to enhance image performance. This device shall also employ the use of a 3-dimensional comb filter and 3-line filter for maximum chrominance and luminance separation and to minimize dot interference and cross color when viewing NTSC video sources.

This device shall have the ability to store and recall multiple memory presets for various video and computer configurations.

#### 4.0 User Interface / Controllability Information

Control of this device shall be accomplished through one of the following methods:

Backlit, projector control panel Wired / Wireless backlit projector remote control Serial control jack for control by external control systems Advanced serial control jack for control by external control systems Advanced serial control jack for control by external signal switchers

All of these control methods shall be standard to the device, or available at an additional charge if considered an optional accessory.

The projector control panel shall be recessed into the cabinet, and shall employ the use of a backlight that activates when any button is pressed. The backlight shall have a timeout function. The control panel shall activate multi-language onscreen menus, which navigate the operator through setup and configuration of the device. The device shall be addressable for control over multiple devices from a single remote control.

The wired / wireless backlit projector remote control shall operate in the same fashion as the projector control panel, and shall accommodate infrared wireless operation, or operation via a standard mini-plug cable. An infrared extender shall be available from the device manufacturer for operation of the device wirelessly in a rear-screen or cabinet environment.

The serial control jack shall employ the use of a standardized device control protocol that is commonly accepted and understood by control systems manufacturers. This control jack shall accept unidirectional serial commands that provide full control over the device.

The advanced serial control jack shall employ the use of a standardized device control protocol that is commonly accepted and understood by control systems manufacturers. This control jack shall accept and transmit bi-directional serial commands that provide full control over the device, and provide acknowledgement to the control system of the received command.

The advanced serial control jack for control by external signal switchers shall employ the use of a standardized device control protocol that is commonly accepted and understood by control and signal switching manufacturers, and shall operate at distances greater than 1000 feet without regeneration from an external device. This control jack shall accept and transmit bi-directional serial commands that provide full control over the device, and provide acknowledgement to the control system of the received command.

The following device functions shall be available for control: Power On / off Input Selection Brightness / Contrast Video Decoder Functions Audio Volume Memory Recall Functions White Balance Gain / Bias Control Image Sizing Image Positioning Lens Power Zoom Lens Power Shift Lens Power Focus

## **5.0** Performance Specifications

This device shall employ the use of 3 Texas Instruments high-resolution 1.1-inch DMD chips. This device shall provide a light output of 10,000 ANSI lumens, when measured using a 1280 x 1024 native resolution signal.

This device shall include a standard power zoom / focus / shift lens, and other lenses shall be available as options for a variety of short-throw and long-throw applications.

This device shall have a minimum RGB resolution of 1280 by 1024 pixels and a minimum video resolution of 600 TV lines.

An automatic dot-phase adjustment technology shall be employed to optimize the display to the input source without user intervention.

This device shall employ the use of a flat-spectrum xenon lamp system, providing for optimum balance between the red, green and blue color spectrum.

This device shall employ the use of a 2-3 pulldown technique for accurate and detailed reproduction of film originating source material.

A 13-bit signal processing shall be employed for accurate, smooth reproduction of color and grayscale images.

#### 6.0 Dimensional Information

This device shall have maximum cabinet dimensions of 13.75 inches high by 28.63 inches wide and 37.38 inches deep.

This device shall not weigh more than 209 pounds.

# 7.0 Connectivity Information

This device shall provide for connection of 4 source devices simultaneously, without employing the use of an external switching device. One of these connections shall be a standard input on the device, with 3 available for custom configuration. The standard connection shall include the following:

RGB Computer / Component Video / HDTV Video (Sync on Green, Composite, or Separate Sync) on BNC Connectors

Optional Modules shall allow for the following connections:

RGB Computer / Component Video (Sync on Green, Composite, or Separate Sync) on BNC Connectors

Audio L/R on RCA (Phono) Connectors

RGB Computer / Component Video (Sync on Green, Composite, or Separate Sync) on a 9 pin (D9) Connector Audio L/R on RCA (Phono) Connectors

RGB Computer / Component Video (Sync on Green, Composite, or Separate Sync) on a VGA (HD15) Connector with loop-through Audio L/R on RCA (Phono) Connectors

Component Serial Digital Video on a BNC Connector with loop-through

Composite Video on a BNC Connector or Y/C Video on a 4 Pin DIN Connector, both with loop-through Audio L/R on RCA (Phono) Connectors

High Definition Serial Digital Video on a BNC Connector with loop-through

These optional modules shall be user-installable, without access to the inside of the device, and shall also be installable in an optional external switching device available from the device manufacturer.

This device shall include a 12V power output for providing power to external devices.

#### 8.0 Power Requirements

This device shall accept power from 220 to 240 VAC at either 50 or 60 Hz.

This device shall consume no more than 2800 watts.

This device shall emit no more than 9556 BTU.

Power to this device shall be supplied via a detachable standard power cord that is readily available for replacement from local suppliers.

# 9.0 Safety Compliance Information

This device shall be fully compliant with the following standards:

UL 1950 cUL 950 FCC Class A IC Class A VCCI Class A JEIDA EN60 950 CE C-Tick

# 10.0 Warranty Information

This device shall carry a 2-year manufacturer's warranty, with a 90-day lamp warranty. Authorized servicing dealers of the devices' manufacturer shall perform warranty service.